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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,987	12/09/2003	Richard Haugland		5842
23358	7590	08/23/2006		
			EXAMINER	
			SACKY, EBENEZER O	
			ART UNIT	PAPER NUMBER
				1626

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/731,987 EBENEZER SACKY	HAUGLAND ET AL. Art Unit 1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 09 June 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
  - 4a) Of the above claim(s) 6,7 and 11-27 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-5 and 8-10 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____.   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/09/04, 04/12/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

This is in response to applicant's amendment filed on 06/09/06.

### **Status of the Claims**

Claims 1-27 are pending.

#### ***Specification***

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

#### ***Information Disclosure Statement***

Receipt of the Information Disclosure Statement filed on 03/09/04 and 04/12/04 respectively is acknowledged and has been entered into the file. Signed copies of the 1449 are attached herewith.

#### ***Response to Amendment***

Applicant's election with traverse of Group I, claims 1-5 and 8-10 and species of Example 3 in the reply filed on 06/09/06 is acknowledged. The traversal is on the

ground(s) that if a search and examination of an entire application can be made without a serious burden, the Examiner must examine it on the merits. This is not found persuasive because each of the various groups can support their own patents. In addition, because of the different classes and subclasses and divergent subject matter, in each of the Groups, a serious burden is imposed on the examiner to perform a complete search of the defined areas. Therefore, for the reasons given previously, the restriction set forth is proper because it would constitute an undue burden on the examiner to examine all of the inventions in this application.

The requirement is still deemed proper and is therefore made FINAL.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 and 9-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. The use of the word "comprising" consistently in the claims render the claims because comprising is an open-ended word, which permit the inclusion of unrecited elements. Claims, especially compound claims should be defined as ---consisting of ---.
2. The phrase "reactive group" is of indeterminate scope. Are esters, acids, and cyano etc., groups included in these categories? First of all, there is no indication of what type of reactive groups are intended. Even if a specific group is

intended, the phrase defines what it does, rather than what it is. Functional language at the point of novelty, as herein employed by Applicants, is admonished in *University of California v. Eli Lilly and Co.* 43 USPQ 2d. 1398 (CAFC, 1997) at 1406: stating this usage does "little more than outline goal appellants hope the recited invention achieves and the problems the invention will hopefully ameliorate". A definition by function, as indicated, does not suffice to define the process. While there are lists of functional groups in textbooks as examples of such type of groups, the terminology requires testing to determine intended scope.

3.) The same remark made directly above applies to the nature of "ring substituted" and "photoactivatable group" which appears to include any ring system and any photoactivatable group. Note *In re Hill*, supra.

#### ***Claim Rejections - 35 USC § 102***

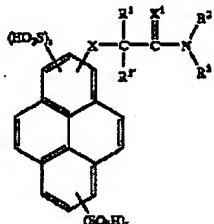
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

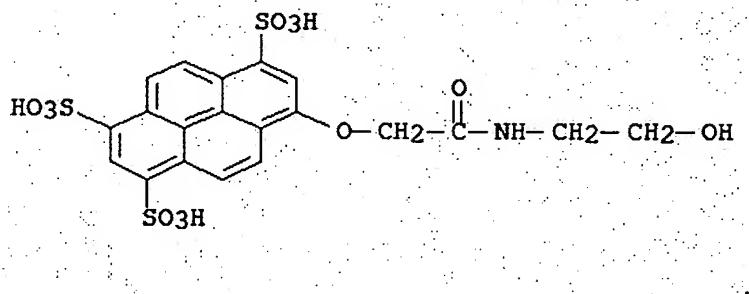
Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Haugland et al., (U.S. Patent number 5,132,432).

Applicants claim compounds of structural formula (I), wherein the substituents



are as defined.

Haugland et al., disclose a compound, which anticipates instant claim 1 when each of X and X' is O, each of R<sup>1</sup> and R<sup>1'</sup> is H, R<sup>2</sup> is H and R<sup>3</sup> is substituted alkyl. Note 1,3,6-Pyrenetrisulfonic acid, 8-[2-[(2-hydroxyethyl)amino]-2-oxoethoxy].



#### **Claim Rejections - 35 U.S.C. § 103**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-2, 5, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haugland et al., (U.S. Patent number 5,132,432)('432').

Applicants claim indole derivatives depicted in claim 50, where the substituents are as defined in the claim.

**Determination of the scope and content of the prior art (MPEP §2141.01)**

Haugland et al., teaches a pyrene compound structurally similar to instantly claimed compound. See the entire reference especially column 2, lines 41-66, columns 7 and 8, Tables 2 and 3.

**Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)**

The instant claims differ from '432' in the generic description of the compounds and in having a C<sub>1-6</sub>alkyl group attached directly to the amino nitrogen, whereas '432' teaches a hydrogen atom attached to said nitrogen. Note that hydrogen vs. methyl on nitrogen is not deemed a patentable difference absent a showing of unexpected results. See Ex

*parte Weston*, 121 USPQ 428 and *In re Doebele*, 174 USPQ 158, regarding hydrogen vs. alkyl on nitrogen.

**Finding of prima facie obviousness---rational and motivation (MPEP §2142-2143)**

Accordingly, it would have been *prima facie* obvious to the skilled artisan at the

time of filing this application to expect compounds claimed herein that are methylated on the aniline nitrogen to also possess the uses taught by the reference in view of the close structural similarity outlined above. Thus, the instantly claimed compound would therefore have been suggested to one of ordinary skill.

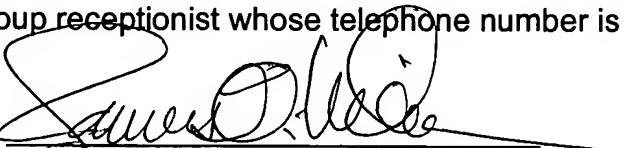
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to E. Sackey whose telephone number is (571) 272-0704.

The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane, can be reached on (571) 272-0699. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.  
EOS  
August 18, 2006



James Wilson  
Supervisory Patent Examiner  
Group 1600  
Technology Center 1